

UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK

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YORKSHIRE TOWERS COMPANY, L.P. and  
YORKSHIRE TOWERS TENANTS ASSOCIATION,

Plaintiffs,

-against-

UNITED STATES DEPARTMENT OF  
TRANSPORTATION, et al

Defendants.

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YORKSHIRE TOWERS COMPANY, L.P. and  
YORKSHIRE TOWERS TENANTS ASSOCIATION,

Plaintiffs,

-against-

THE FEDERAL TRANSIT ADMINISTRATION, et al

Defendants.  
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**Case No. 11-cv-1058 (TPG)**

**Declaration of Ernest A. Conrad  
in Support of Motion for  
Preliminary Injunctive Relief,  
and in Opposition to  
Limitations Motion  
Regarding New Information  
Under 23 U.S.C. 139(l)(2)  
(2 of 4)**

**Case No. 10-cv-8973 (TPG)**

Ernest A. Conrad, declares the following:

1. I am a licensed professional mechanical engineer in eleven states, including New York with over 40 years of experience, and a principal of Landmark Facilities Group, an engineering firm specializing in the design of mechanical, electrical, plumbing and fire protection systems.

2. Active involvement in leading industry associations regarding the development of building, fire and related engineering codes and best practices, including the Building Owners and Managers Association ("BOMA") of New York, where I was awarded

Outstanding Member of the Year, is important to me. Currently I serve as co-chair of the Energy and Environment Committee for BOMA International, voting liaison for BOMA International to the American Society of Heating, Refrigeration and Air Conditioning Engineers (“ASHRAE”) Standing Standard Project Committee (“SSPC”) 90.1 and SSPC 89.1 and the Project Management Professional Best Practices Committee. I represent BOMA International on Code matters regarding ASHRAE, International Code Council, National Fire Protection Association, and other New York City code bodies.

3. As a member of the design and engineering team for the Yorkshire Towers Owner and Tenants Association (collectively, “YT”) studying and analyzing significant new information we have learned and that has led us to a new corner entrance design solution, never previously the subject of environmental impact assessment, I am fully familiar with the facts and circumstances involved in the above-captioned Freedom of Information and Environmental Law Cases brought by YT.

4. This Declaration is in support of Plaintiffs’ motion for preliminary injunctive relief, and in opposition to the limitations motion by the government defendants (collectively, “FTA and MTA”, or the “Agencies”) regarding the right of YT to present significant new information related to their corner entrance subway alternative, known as “Reduced Alt 5.”

**A. FTA and MTA Disregard the Important New Changes in the Fire and Life Safety Code Provisions under NFPA 130 (2010 ed.) after Issuance of the SEA that the Reduced Alt 5 Design Incorporates: Use of Five Emergency, High-Speed, Generator-Powered Elevators; Smoke-Purged Safety Area; and Better Fire Fighter Access**

5. The Reduced Alt 5 design on the SE corner adds the important and significant public safety benefit of compliance with the most current and higher code standards for

fire and life safety evacuation recognized under (2010 ed) NFPA 130<sup>1</sup> and the post 9/11, Local Law 26 and NYC Fire Code through the use of elevators.<sup>2</sup> While the Preferred Alternative meets minimum standards regarding fire and life evacuation standards under NFPA 130 under either the 2007 or the 2010 editions for escalators, Reduced 5 offers a better and improved public safety alternative by exceeding these standards.

6. Compliance with higher public safety standards regarding fire and life evacuation represented by Reduced Alt 5 would be consistent with MTA CEO Jay Walder's oft publicly stated policy that "[t]he safety and security of our customers is our top priority." Furthermore, the MTA, MTA New York City Transit and MTA LIRR have 4 members and the DOT has 2 members on the technical committee that voted for

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<sup>1</sup> The National Fire Protection Association 130, Standard for Fixed Guideway Transit and Passenger Rail Systems, 2010 Edition, incorporates standards for emergency elevator egress for the first time. NFPA 130 (2010 ed.) § 5.5.6.3.3, effective August 26, 2009, expressly provides for the use of elevators for up to 50% of the emergency egress capacity of a subway station. A complete copy of this new and important code standard is attached as Exhibit 9.

It is more realistic to use elevators in deep stations. The proposal for the inclusion of elevators for subway systems under NFPA (2010 ed.) was submitted by E. Katherine Fagerlund of Senez Reed Calder Fire Engineering Inc., who pointed out the following in support of her proposal:

"[i]n some very deep stations it is more realistic to use elevators as part of the evacuation scheme than it is to use only stairs and escalators. However, where the use of elevators is considered they must have special protection. . . . In reality, subways and buildings are including elevators as part of egress, but including them using the Equivalency method [under NFPA 130 2010 Ed. § 1.4] . . . This proposal intends to be conservative in its approach to elevators as emergency egress. Holding areas are required to be larger than typical, they are required to be pressurized and redundancy is required. Thus, the combination described in the proposal should provide a good minimum standard for use of elevators in underground transit and passenger rail systems." National Fire Protection Association, 2009 Annual Revision Cycle, Report on Proposals, pp. 130-19-20, No. 130-54.

<sup>2</sup> The study of September 11, 2001 evacuation began the modern trend towards use of elevators for emergency egress. In the 16 minutes before the second tower at the World Trade Center was struck, nearly 3,000 occupants were able to evacuate to safety because they used elevators. Christopher E. Chwedyk, Use of Elevators by Firefighters and Use of Elevators for Occupant Egress (2010) available at <http://burnhamnationwide.com/tag/use-of-elevators-by-firefighters-and-use-of-elevators-for-occupant-egress>.

approval of the new, improved standards of public safety regarding fire and life safety evacuation represented by the use of elevators under the (2010 ed.) NFPA 130.<sup>3</sup> Going forward with Reduced Alt 5, with substantially reduced adverse impacts, a subset of a “build” alternative that the MTA already determined to be viable, would also be in keeping with the DOT and MTA having already approved this more advanced code standard regarding public safety by their participation in, and voting on the technical committee that adopted it.

7. Post 9/11, Local Law 26 providing for an emergency action plan and NYC Fire Code providing for elevators in readiness for use by the FDNY regarding fire and life safety evacuation apply to vertical structures 75 feet or more above ground. They are not mandatory for underground subway stations and entrances, as here at 86<sup>th</sup> Street. However, voluntary compliance with these higher standards under the Reduced Alt 5 design makes this the far more preferable “build” alternative from a public safety point of view. This is especially so, since the post 9/11, Local Law 26 and NYC Fire Code would otherwise be applicable to Reduced Alt 5 based on the considerable depth of the station, 80 feet.

8. There have been significant advances in fire and life safety evacuation by the use of elevators instead of escalators. They generally fall into three categories: emergency evacuation, ADA escape with a protected refuge area as well as vastly improved FDNY access to fight fires.

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<sup>3</sup> Robert Montfort representing MTA New York City Transit and Stephanie H. Markos representing the United States Department of Transportation voted for adoption of the new standards for the use of elevators in subway systems under NFPA (2010 ed.).

9. Elevators provide the obvious advantage of speed in an emergency if they incorporate proper design and technology to operate safely. They increase overall building evacuation time substantially. The Use of Elevators for Egress, NRCC-51387, Proulx, G., et. al., July 13, 2009. The speed of elevators is important in at least three material respects.

10. First, elevators provide for evacuation of persons with disabilities. Emergency Egress Strategies for Buildings, Richard W. Bukowski, P.E., FSFPE, NIST Building and Fire Research Laboratory. Occupants with disabilities typically proceed to a mandated area of refuge and request evacuation assistance through a two-way communication system to the fire command center. Protected Elevators for Egress and Access During Fires in Tall Buildings, Richard W. Bukowski, P.E., FSFPE, NIST Building and Fire Research Laboratory, p. 18.

11. Second, elevators allow an additional means of egress to the point of safety for passengers. This is crucial where there are a large number of people involved in evacuation, and rescue operations would benefit from simultaneous use of the stairs and elevators without causing conflict with evacuating individuals. Protected Elevators for Egress and Access During Fires in Tall Buildings, Richard W. Bukowski, P.E., FSFPE, NIST Building and Fire Research Laboratory, p. 19. Although counter-flow may have little impact on evacuation, it has substantial impacts on fire service access. Emergency Egress Strategies for Buildings. Transferring fire service access to protected elevators eliminates such issues. Id.

12. Third, the use of emergency elevators allows firefighters to travel to an area near the fire to stage their equipment and access a standpipe. The firefighters then use a stairwell or other passageway to access the fire, which allows them to maintain an area of retreat in case the fire threatens them. This method provides for efficient transportation of firefighting equipment to the hazard, since firefighters do not have to expend time or energy traveling down stairs with their equipment. Protected Elevators for Egress and Access During Fires in Tall Buildings, Richard W. Bukowski, P.E., FSFPE, NIST Building and Fire Research Laboratory, p. 17-18.

13. In sum, Reduced Alt 5 would provide better fire and emergency evacuation service in all of the foregoing respects. The design has five elevators instead of the one ADA compliant elevator provided for under the FTA and MTA's Preferred Alternative, which has the risk of being the only elevator going out of service. Under Reduced Alt 5, one elevator could be used to evacuate disabled individuals; a second could be used for firefighter access and the remaining available elevators used for rapid evacuation of able-bodied passengers. This is in marked contrast to the Preferred Alternative, which only provides one elevator for access and egress. Assuming the elevator does not go out of service, evacuating disabled persons would take priority at the expense of permitting rapid firefighter access.

14. The FTA's Findings of No Significant Impact ("FONSI"), issued in December 2009 approving the MTA's Supplemental Environmental Assessment ("SEA") published in May 2009 does not take into account the substantially improved and more advanced fire and life safety standards under the 2010 ed of NFPA 130 (effective 8/26/2009) represented by the use of elevators. Reduced Alt 5 represents an important opportunity to

meet these new and higher standards by ensuring that there will be faster emergency evacuation, that there are provisions for ADA escape with a protected refuge area as well as enhanced FDNY access to fight fires.

**B. Other Public Safety Benefits Realized by Going Forward with Reduced Alt 5 in Contrast to the Preferred Alternative**

15. The Agencies also ignore the other public safety benefits that are realized by going forward with Reduced Alt 5 instead of the Preferred Alternative. These include: 1) No Obstructed Vehicle Views; 2) No Pedestrian Congestion or Risk of Accidents; 3) No Diminishing or Blocking of Access and Egress for over 2,000 residents during 3 years of construction; and 4) No Increased Ambulance and FDNY Response times for residents in emergencies during the protracted period of construction.

**C. The Flawed Assumptions by the FTA and MTA regarding the need for Two 5' 8" Egress Stairs Serving as Pretext to Reject Reduced Alt 5 and Proceed with Unnecessary Relocation and Replacement of Utilities Required for Their Preferred Alternative**

16. The Agencies incorrectly assume that the two large, over 5 feet wide, stairs are required in order to meet emergency fire and life safety evacuation standards under NFPA 130 under the Reduced Alt 5 elevator solution design. Based on this assumption they argue that 10 feet of cut and cover construction into the south side of 86<sup>th</sup> Street away from the sidewalk line for Reduced Alt 5 is necessary, which in turn impacts on water lines and a sewer main in the middle of the roadway that they then say must be replaced. Putting aside the accuracy of the impact on the utilities, for the sake of discussion, which is not supported by the design and technical drawings, furnished by the Agencies to YT's design and engineering team, the important point is that the FTA and

MTA's conclusions regarding the stairs, and utility relocation and replacement is built on a false premise.

17. What Agencies neglect to point out is that no set of 5' 8" wide stairs would be required if they meet and exceed standards for fire and life safety evacuation recognized under (2010 ed) NFPA 130 (the "2010 Code") using five emergency high speed, generator-powered elevators using state of the art technology with a smoke-purged refuge area and better fire fighter access. This is so because elevators under the new code standard may be counted as 50% of emergency egress and there is another set of such 5' 8" stairs at the northwest corner meeting the other 50% required for 100% compliance with emergency egress standards.

18. Instead, the Agencies are relying on the outdated 2007 ed. of NFPA 130 ("the 2007 Code"), which is silent on the use of elevators for emergency evacuation. Thus, they were stuck with using escalators to get to their 50% evacuation load (the northwest corner providing the other 50%). This plainly drove their decision to put a huge hole in the ground on the sidewalk in front of Yorkshire Towers for these massive escalators (see Exhibit 4, Illustrative Architectural Drawing by my colleague, Edward Cohen showing construction area impact of the Preferred Alternative nearly 4 times larger than Reduced Alt 5).


19. Reduced Alt 5 exceeds the old and obsolete 2007 Code through the use of the 2010 Code, which reflects "modern thinking" in the eyes of not only the FTA and MTA technical representatives who were on the committee that voted for the passage of the 2010 Code, but in the eyes of Fire Department of the City of New York ("FDNY"). Post



9/11, FDNY has actively promoted the use of emergency, generator-powered elevators to assist them in their fire fighting and life safety efforts as proposed under the Reduced Alt 5 design.

20. The most that would be required under the 2010 Code for Reduced Alt 5 would be one substantially smaller, 44-inch wide stair. This one smaller stair more than likely can be designed within the sidewalk line and entirely eliminate any need to relocate or replace the utilities in question. At minimum, any arguable impacts with regard to the utilities can be reasonably accommodated for by relatively minor design modifications as pointed out in the accompanying Declaration of our design architect, Edward Cohen who specializes in transportation projects.

I declare under penalty of perjury that the foregoing is true and correct.  
Executed on October 12, 2011.

  
Ernest A. Conrad